H.D. Tullis CO.

MATERIAL SAFETY DATA SHEET

SECTION 1 - MATERIAL IDENTIFICATION

Manufacturers Name M. W. Dunton Company

Distributor Name (If Applicable) DPM 1360

Address 3 Fridal Avenue, Box 232

Address West Warwick, RI 02893

Emergency Telephone 401-821-1832

MSDS Date 2/28/86

SECTION 2 - HAZARDOUS MATERIALS

NOKORODE SOLDERING PASTE

Composition	% wt.	CAS#	PEL	TLV
Zinc Chloride	less than 25	7646-86-7	1 (fume)	1 (fume)
Ammonia Chloride	less than 25	12125-02-9	10 (fume)	10 (fume)
Petrolatum	over 50	None Listed	None Listed	None Listed
Remainder Nonhazardous Proprietary Listed with T.O.S.C.A.				

SECTION 3 - PHYSICAL DATA (TOTAL PRODUCT)

Specific Gravity=1.06, insoluble in water, Melting Point 120-150°F

Paste Flux - Appearance - Tan/Gold Color Paste, no appreciable odor.

SECTION 4 - FIRE AND EXPLOSION DATA

This is a nonflammable material. When heated the material may release zinc chloride and zinc oxide fumes. Flash Point:ASTM D-92 204 Min CO If large quantities are involved in a fire, firefighters should use self contained breathing apparatus and protective clothing. Extinguish with Foam, Sand, CO_2

SECTION 5 - HEALTH HAZARD DATA

When heated during soldering, fumes generated may irritate the respiratory tract. The flux may irritate the skin. Eye contact will cause intense irritation and may injure eye tissue if not promptly removed.

Emergency First Aid Procedures - Eye contact, flush with water for at least 15 minutes, including under the eyelids. Call physician.

Skin contact: Flush with water and soap.

Ingestion - If swallowed, give plenty of water or milk. Do not induce vomiting. Call physician immediately.

Inhalation - Move to fresh air, consult physician.

SECTION 6 - REACTIVITY DATA

Flux is a stable material in closed containers at room temperature under normal storage and handling conditions.

Incompatible with cyanides, may release HCN gas when mixed with zinc chloride. If combined with sulfides, the liquid flux may release H_2S gas.

Soldering fumes cannot be classified simply. The composition and quantity are dependent upon the metal being soldered, the process, procedures, and types of solders used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coatings on the metal being soldered (such as paint, plating, or galvanizing), the number of operators and the volume of the work area, the quality and amount of ventilation, the position of the operator's head with respect to the fume plume, as well as the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from cleaning and degreasing activities).

SECTION 7 - SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled - Neutralize with sodium carbonate or tri-sodium phosphate.

Waste Disposal Method - Flush to chemical waste disposal according to Federal, State and Local regulations.

SECTION 8 AND 9 - SPECIAL PROTECTION INFORMATION AND PRECAUTIONS

Ventilation
Use enough ventilation, local exhaust at the flame to keep the fumes and gases below TLV's in the worker's breathing zone and the general area. Train the employee to keep his head out of the fumes. See ANSI/ASC Z49.1 Section 5.

Respiratory Protection
Use respirable fume respirator or air supplied respirator when soldering in confined space or where local exhaust or ventilation does not keep exposure below TLV.

Eye Protection
Wear goggles. Wear face shield if splashing is probable.

Protective Clothing
Wear head and body protection which help to prevent injury from splashing, sparks, or flame. While working with heat, gloves may be required for sensitive individuals.